



PATENT / DOCKET NO.: 24061.77 / TSMC2003-0441  
CUSTOMER NO.: 42717

**INVENTOR'S DECLARATION FOR  
PATENT APPLICATION**

As below named inventors, we hereby declare that:

Our residence, post office address and citizenship are as stated below next to our names;

We believe we are the original, first and sole joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled

**A SYSTEM AND METHOD FOR IDENTIFYING SEMICONDUCTOR PROCESS  
STEPS FOR QUEUE-TIME CONTROL AND ABNORMALITY DETECTION**

the specification of which: (check one)

\_\_\_\_\_ is attached hereto.

  X   was filed on April 14, 2004  
under Attorney's Docket Number 24061.77 (TSMC2003-0441)  
as Application Serial No. 10/823,872  
and was amended on \_\_\_\_\_ (if applicable).

We hereby authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.).

We hereby state that we have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

We acknowledge the duty to disclose information which is material to the patentability of this application in accordance with 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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FULL NAME OF INVENTOR: Chia-Chun Liu

INVENTOR'S SIGNATURE: ✓ Chia-Chun, Liu DATED: ✓ 04/21/2004

RESIDENCE: Hsin-Chu 300, Taiwan, R.O.C.

POST OFFICE ADDRESS: 6, Creation Rd. 2, Science-Based Industrial Park  
Hsin-Chu 300, Taiwan, R.O.C.

CITIZENSHIP: Taiwan, R.O.C.

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FULL NAME OF INVENTOR: Chih-Yuan Chang

INVENTOR'S SIGNATURE: ✓ Chih-Yuan, Chang DATED: ✓ 04/27/2004

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CITIZENSHIP: Taiwan, R.O.C.

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FULL NAME OF INVENTOR: Chih-Hung Wu

INVENTOR'S SIGNATURE: ✓ Chih-Hung, Wu DATED: ✓ 04/21/2004

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CITIZENSHIP: Taiwan, R.O.C.

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FULL NAME OF INVENTOR: Kuo-Rong Hsiao

INVENTOR'S SIGNATURE: ✓ Kuo-Rong, Hsiao DATED: ✓ 22/04/2004

RESIDENCE: Hsin-Chu, Taiwan, R.O.C.

POST OFFICE ADDRESS: No. 6, Jin-Shan St. 13  
Hsin-Chu, Taiwan, R.O.C.

CITIZENSHIP: Taiwan, R.O.C.

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**ASSIGNMENT**

WHEREAS, we,

- |     |                 |    |  |
|-----|-----------------|----|--|
| (1) | Chia-Chun Liu   | of | 6, Creation Rd. 2, Science-Based Industrial Park<br>Hsin-Chu 300, Taiwan, R.O.C.                 |
| (2) | Chih-Yuan Chang | of | No. 60, Lane 23, Guangzheng Se. Bangiao City, Taipei County 220 Taiwan, R.O.C.                   |
| (3) | Chih-Hung Wu    | of | 5F, No. 3-2, Lane 109, Sec. 3, Heping W. Rd.<br>Wanhua District, Taipei City 108, Taiwan, R.O.C. |
| (4) | Kuo-Rong Hsiao  | of | No. 6, Jin-Shan St. 13<br>Hsin-Chu, Taiwan, R.O.C.   |

have invented certain improvements in

**A SYSTEM AND METHOD FOR IDENTIFYING SEMICONDUCTOR PROCESS STEPS FOR QUEUE-TIME CONTROL AND ABNORMALITY DETECTION**

for which we have executed an application for Letters Patent of the United States of America,

         of even date filed herewith; and  
  X   filed on April 14, 2004 and assigned application number 10/823,872; and

WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, Taiwan Semiconductor Manufacturing Company, Ltd., ("TSMC"), No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty

it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

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Inventor Name: Chia-Chun Liu

Residence Address: 6, Creation Rd. 2, Science-Based Industrial Park  
Hsin-Chu 300, Taiwan, R.O.C.

Dated: 04/21/2004

Chia-Chun, Liu  
Inventor Signature

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Inventor Name: Chih-Yuan Chang

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Dated: ✓ 04/27/2004

✓ Chih-Yuan, Chang  
Inventor Signature

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Inventor Name: Chih-Hung Wu

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Dated: ✓ 04/21/2004

✓ Chih Hung Wu.  
Inventor Signature

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Inventor Name: Kuo-Rong Hsiao

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Dated: ✓ 04/22/2004

✓ Kuo-Rong Hsiao  
Inventor Signature

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